

COMPLETE LISTING OF THE CLAIMS

Claim 1 (currently amended): A method for managing transmission and reception of data over a network, said network ~~which includes~~ including at least a transmission-side apparatus having a plurality of transmission-side functional modules which individually produce and output a plurality of control data ~~sets;~~ sets, and a reception-side apparatus having a plurality of reception-side functional modules which realize independent functions by use of input control data sets, respectively, wherein a control data set output from a transmission-side functional module and transmitted from the transmission-side apparatus is received by the reception-side apparatus and is input to a reception-side functional module corresponding to the transmission-side functional module, wherein correspondence between at least two transmission-side functional modules among the plurality of transmission-side functional modules and at least two reception-side functional modules among the plurality of reception-side functional modules is established; said method comprising the steps of:

storing at the reception-side apparatus ~~stores therein~~ first identification data which represent one transmission-side functional module among the at least two transmission-side functional modules, and second identification data which represent one reception-side functional module among the at least two reception-side functional modules, the one reception-side functional module receiving a control data set output from the one transmission-side functional module;

adding at the transmission-side apparatus ~~adds~~ third identification data to a the control data set output from one transmission-side functional module among the at least two transmission-side functional modules ~~and transmits the control data set within the network~~, the third identification data representing the one transmission-side functional module; ~~and~~

transmitting the control data set to which the third identification data is added from the transmission-side apparatus to the network;

receiving at the reception-side apparatus the transmitted control data set to which the third identification data is added; and

~~the reception-side apparatus uses the first identification data, the second identification data and the third identification data so as to apply~~

applying at the reception-side apparatus a relationship between the first identification data and the third identification data to the second identification data, to thereby specify the one reception-side functional module to which the control data set is to be input.

Claim 2 (currently amended): The method of ~~A method for managing transmission and reception of data over a network according to claim 1,~~

wherein the first identification data and the third identification data represent respectively each one of numbers assigned sequentially to the at least two transmission-side functional modules, and ; and

wherein the relation between the first identification data and the third identification data is difference between a number represented by the first identification data and a number represented by the third identification data.

Claim 3 (currently amended): The method of ~~A method for managing transmission and reception of data over a network according to claim 2,~~

wherein the second identification data represents one of numbers assigned sequentially to the at least two reception-side functional modules, and; ~~and~~

~~the reception-side apparatus~~ wherein the step of applying at the reception-side apparatus specifies the one reception-side functional module in accordance with a number obtained through a mathematical operation of adding the difference to a number represented by the second identification data.

Claim 4 (currently amended): The method of ~~A method for managing transmission and reception of data over a network according to claim 1,~~ further comprising the steps of: wherein

storing at the reception-side apparatus ~~further stores therein~~ fourth identification data consisting of at least one type of data selected from among type data representing a type of the control data set to be transmitted, apparatus type data representing a type of the transmission-side apparatus, and apparatus data representing the transmission-side apparatus;

adding at the transmission-side apparatus ~~adds~~ the fourth identification data to the control data set output from the one transmission-side functional module among the at least two transmission-side functional modules;

transmitting and transmits the control data set to which the third and fourth identification data are added to ~~within~~ the network; and

specifying the reception-side apparatus ~~specifies~~ the control data set to be received, on the basis of the fourth identification data added to the control data set.

Claim 5 (currently amended): A method for managing transmission and reception of data over a network, said network including ~~which includes~~ at least a transmission-side apparatus having a plurality of transmission-side functional modules which individually produce and output a plurality of control data sets, and ~~;~~ and a reception-side apparatus having a plurality of reception-side functional modules which realize independent functions by use of input control data sets, respectively, wherein a control data set output from a transmission-side functional module and transmitted from the transmission-side apparatus is received by the reception-side apparatus and is input to a reception-side functional module corresponding to the transmission-side functional module; wherein correspondence between at least two transmission-side functional modules among the plurality of transmission-side functional modules and at least two reception-side functional modules among the plurality of reception-side functional modules is established, said method comprising the steps of;

storing at the reception-side apparatus ~~stores therein~~ first identification data which represent one transmission-side functional module among the at least two transmission-side functional modules, second identification data which represent one reception-side functional module among the at least two reception-side functional modules, the one reception-side functional module receiving a control data set output from the one transmission-side functional module, and third identification data for specifying the at least two transmission-side functional modules, while using ~~the~~ a relationship with the one transmission-side functional module represented by the first identification data;

adding at the transmission-side apparatus ~~adds~~ fourth identification data to ~~a~~ the control data set output from the one transmission-side functional module among the at least two

transmission-side functional modules ~~and transmits the control data set within the network~~, the fourth identification data representing the one transmission-side functional module; ~~and~~

transmitting the control data set to which the fourth identification data is added from the transmission-side apparatus to the network;

receiving at the reception-side apparatus ~~determines to receive~~ the control data set if the fourth identification data represent one of transmission-side functional modules specified by the first and third identification data; and ~~, and uses the first identification data, the second identification data and fourth identification data so as to apply~~

applying at the reception-side apparatus a relationship between the first identification data and the fourth identification data to the second identification data, to thereby specify the one reception-side functional module to which the control data set is to be input.

Claim 6 (currently amended): The method of ~~A method for managing transmission and reception of data over a network according to~~ claim 5,

wherein the first identification data and the fourth identification data represent respectively each one of numbers assigned sequentially to the at least two transmission-side functional modules; ~~;~~ and

wherein the relation between the first identification data and the fourth identification data is difference between a number represented by the first identification data and a number represented by the fourth identification data.

Claim 7 (currently amended): The method of ~~A method for managing transmission and reception of data over a network according to claim 6,~~

wherein the second identification data represents one of numbers assigned sequentially to the at least two reception-side functional modules; and

wherein the step of applying at the reception-side ~~the reception-side~~ apparatus specifies the one reception-side functional module in accordance with a number obtained through a mathematical operation of adding the difference to a number represented by the second identification data.

Claim 8 (currently amended): The method of ~~A method for managing transmission and reception of data over a network according to claim 5,~~

wherein the correspondence between the at least two transmission-side functional modules and the at least two reception-side functional modules is established in such a manner that the transmission-side functional module represented by the first identification data and transmission-side functional modules subsequent thereto are sequentially related to the reception-side functional module represented by the second identification data and reception-side functional modules subsequent thereto, respectively; and

wherein the third identification data represent a number of transmission-side functional modules including the one transmission-side functional module represented by the first identification data and transmission-side functional modules subsequent thereto.

Claim 9 (currently amended): The method of ~~A method for managing transmission and reception of data over a network according to claim 5, wherein~~ further comprising the steps of:

storing at the reception-side apparatus ~~further stores therein~~ fifth identification data consisting of at least one type of data selected from among type data representing a type of the control data set to be transmitted, apparatus type data representing a type of the transmission-side apparatus, and apparatus data representing the transmission-side apparatus;

adding at the transmission-side apparatus ~~add~~ the fifth identification data to the control data set output from the one transmission-side functional module among the at least two transmission-side functional modules;

transmitting and transmits the control data set to which the fourth and fifth identification data are added to ~~within~~ the network; and

specifying at the reception-side apparatus ~~specifies~~ the control data set to be received, on the basis of the fifth identification data added to the control data set.

Claim 10 (currently amended): ~~An apparatus~~ A system for managing transmission and reception of data over a network, said network including ~~which includes~~ at least transmission-side apparatus having a plurality of transmission-side functional modules which individually produce and output a plurality of control data sets; and a reception-side apparatus having a plurality of reception-side functional modules which realize independent functions by use of input control data sets, respectively, wherein a control data set output from a transmission-side functional module and transmitted from the transmission-side apparatus is received by the reception-side apparatus and is input to a reception-side functional module corresponding to the transmission-side functional module, wherein correspondence between at least two transmission-side functional modules among the plurality of transmission-side functional modules and at least two reception-side functional modules among the plurality of reception-side functional modules is established;

the transmission-side apparatus comprises transmission controller for adding first identification data to a the control data set output from the one transmission-side functional module among the at least two transmission-side functional modules and for transmitting the control data set to which the first identification data is added to ~~within~~ the network, the first identification data representing the one transmission-side functional module; and

the reception-side apparatus comprises
a management information storage device for storing second identification data which represent one transmission-side functional module among the at least two transmission-side functional modules, and third identification data which represent one reception-side functional module among the at least two reception-side functional modules, the one reception-side functional module receiving a control data set output from the one transmission-side functional module, and

a reception controller for using the first identification data, second identification data and the third identification data so as to apply a relationship between the first identification data and the second identification data to the third identification data, to thereby specify the one reception-side functional module to which the control data set is to be input.

Claim 11 (currently amended): The system of ~~An apparatus for managing transmission and reception of data over a network according to~~ claim 10, wherein

the management information storage device of the reception-side apparatus further stores forth identification data consisting of at least one type of data selected from among type data representing a type of the control data set to be transmitted, apparatus type data representing a type of the transmission-side apparatus, and apparatus data representing the transmission-side apparatus;

the transmission controller of the transmission-side apparatus adds the fourth identification data to the control data set output from the one transmission-side functional module among the at least two transmission-side functional modules and transmits the control data set to which the first and the fourth identification data are added to ~~within~~ the network; and

the reception controller of the reception-side apparatus specifies the control data set to be received, on the basis of the fourth identification data added to the control data set.

Claim 12 (currently amended): ~~An apparatus~~ A system for managing transmission and reception of data over a network which includes at least a transmission-side apparatus having a plurality of transmission-side functional modules which individually produce and output a plurality of control data sets; and a reception-side apparatus having a plurality of reception-side functional modules which realize independent functions by use of input control data sets, respectively, wherein a control data set output from a transmission-side functional module and transmitted from the transmission-side apparatus is received by the reception--side apparatus and is input to a reception-side functional module corresponding to the transmission-side functional module, wherein

correspondence between at least two transmission-side functional modules among the plurality of transmission-side functional modules and at least two reception-side functional modules among the plurality of reception- side functional modules is established;

the transmission-side apparatus comprises transmission controller for adding first identification data to a the control data set output from one transmission-side functional module among the at least two transmission-side functional modules and for transmitting the control data set to which the first identification data is added to within the network, the first identification data representing the one transmission-side functional module; and

the reception-side apparatus comprises

a management information storage device for storing second identification data which represent one transmission-side functional module among the at least two 'transmission-side functional modules , third identification data which represent one reception-side functional module among the at least two reception-side functional modules, the one reception-side functional module receiving a control data set output from the one transmission-side functional module, and fourth

identification data for specifying the at least two transmission-side functional modules, while using the a relationship with the one transmission- side functional module represented by the second identification data, and

a reception controller for determining to receive the control data set if the first identification data represent one of transmission-side functional modules specified by the second and fourth identification data, and for using the first identification data, the second identification data and third identification data so as to apply a relationship between the first identification data and the second identification data to the third identification data, to thereby specify the one reception-side functional module to which the control data set is to be input.

Claim 13 (currently amended): The system of ~~An apparatus for managing transmission and reception of data over a network according to~~ claim 12, wherein

the correspondence between the at least two transmission-side functional modules and the at least two reception-side functional modules is established in such a manner that the transmission-side functional module represented by the second identification data and transmission-side functional modules subsequent thereto are sequentially related to the reception-side functional module represented by the third identification data and reception-side functional modules subsequent thereto, respectively; and

the fourth identification data represent a number of transmission-side functional modules including the one transmission-side functional module represented by the second identification data and transmission-side functional modules subsequent thereto.

Claim 14 (currently amended): The system of ~~An apparatus for managing transmission and reception of data over a network according to claim 12,~~

wherein the management information storage device of the reception-side apparatus further stores fifth identification data consisting of at least one type of data selected from among type data representing a type of the control data set to be transmitted, apparatus type data representing a type of the transmission-side apparatus, and apparatus data representing the transmission-side apparatus;

wherein the transmission controller of the transmission-side apparatus adds the fifth identification data to the control data set output from the one transmission-side functional module among the at least two transmission-side functional modules and transmits the control data set to which the first and the fourth identification data are added to ~~within~~ the network; and

the reception controller of the reception-side apparatus specifies the control data set to be received, on the basis of the fifth identification data added to the control data set.

Claims 15-18 (canceled)

Claim 19 (new): A reception-side apparatus having a plurality of reception-side functional module that realize independent functions by use of control data sets respectively, the control data sets being transmitted from a transmission-side apparatus having a plurality of transmission-side functional modules that individually produce and output the control data sets, wherein correspondence between at least two transmission-side functional modules among the plurality of transmission-side functional modules and at least two reception-side functional modules among the plurality of reception-side functional module is established, the reception-side apparatus comprising:

a management information storage device for storing first identification data that represent one transmission-side functional module among the at least two transmission-side functional modules, and second identification data that represent one reception-side functional module among the at least two reception-side functional modules, the one reception-side functional module receiving a control data set output from the one transmission-side functional module;

a reception portion for receiving a control data set to which third control identification data is added by the transmission-side apparatus, the third identification data representing the one transmission-side functional module; and

a reception controller for applying a relationship between the first identification data and the third identification data to the second identification data, to thereby specify the one reception-side functional module to which the control data set is to be input.

Claim 20 (new): A reception-side apparatus having a plurality of reception-side functional module that realize independent functions by use of control data sets respectively, the control data sets being transmitted from a transmission-side apparatus having a plurality of transmission-side functional modules that individually produce and output the control data sets, wherein correspondence between at least two transmission-side functional modules among the plurality of transmission-side functional modules and at least two reception-side functional modules among the plurality of reception-side function module is established, and reception-side apparatus comprising:

- a management information storage device for storing first identification data that represent one transmission-side functional module among the at least two transmission side functional modules, second identification data that represent one reception-side functional module among the at least two reception-side functional modules, the one reception-side functional module receiving a control data set output from the one transmission-side functional module, and third identification data for specifying the at least two transmission-side functional modules, while using a relationship with the one transmission-side functional module represented by the first identification data;

- a reception portion for receiving a control data set to which fourth control identification data is added by the transmission-side apparatus, the fourth identification data representing the one transmission-side functional module; and

- a reception controller for determining to receive the control data set if the fourth identification data represent one of transmission-side functional modules specified by the first and the third identification data, and for applying a relationship between the first identification

data and the fourth identification data to the second identification data, to thereby specify the one reception-side functional module to which the control data set is to be input.